

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

(19) World Intellectual Property Organization
International Bureau

AAG

(43) International Publication Date
17 May 2001 (17.05.2001)

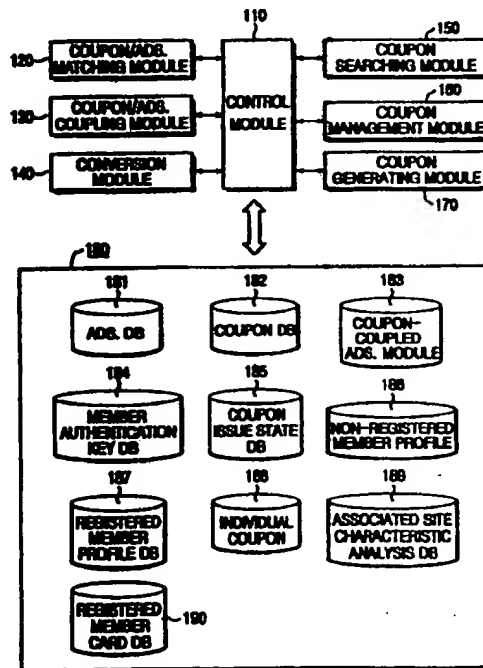
PCT

(10) International Publication Number
WO 01/35287 A1

- (51) International Patent Classification⁷: G06F 17/60 (72) Inventor; and
(75) Inventor/Applicant (for US only): YANG, Jong-Seog
(21) International Application Number: PCT/KR00/00966 (KR/KR); Oseong B/D 3rd Floor, 921 Daechi-dong, Gangnam-gu, Seoul 135-843 (KR).
(22) International Filing Date: 29 August 2000 (29.08.2000) (74) Agent: JUNG, Hyun-Young; 3rd Floor, Namsung B/D, 1474-12 Silim 11-dong, Gwanak-gu, Seoul 151-021 (KR).
(25) Filing Language: Korean
(26) Publication Language: English
(30) Priority Data:
1999/49280 8 November 1999 (08.11.1999) KR
2000/08863 23 February 2000 (23.02.2000) KR
2000/48980 23 August 2000 (23.08.2000) KR
(81) Designated States (national): AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW.
(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE,

[Continued on next page]

(54) Title: SYSTEM AND METHOD FOR ADVERTISING USING COUPON-COUPLED ADVERTISEMENT



(57) Abstract: An advertising system is provided in which an operating server having a database built therein, a plurality of members, an advertiser providing information about ads, a coupon provider, and web servers of associated sites are connected over the Internet. The operating server includes a coupon generating module for generating coupons by assigning serial numbers or setting an expiration date; a coupon-ads matching module for judging whether a coupon issue condition is matched to an ads display condition and selecting an optimally matched coupon and ads; a coupon-ads coupling module; a conversion module for converting a coupon; a coupon management module; and a control module for controlling each of the modules and a data flow among each of the modules.

WO 01/35287 A1



IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CL, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

— *With international search report.*

SYSTEM AND METHOD FOR ADVERTIZING USING COUPON-COUPLED ADVERTISEMENT

BACKGROUND OF THE INVENTION

5

Field of the Invention

The present invention relates to an advertising system and method using coupon-coupled advertisement, and more particularly, to an advertising system which increases click through rate(hereinafter, referred to as "CTR") by allowing a user of public computer networks such as the Internet to make a connection to an operating server through the Internet and click an advertising message combined with a coupon useful or meaningful to the user in such a manner that the advertising message with the coupon can be displayed and used, to thereby achieve an improved effectiveness of advertising and allow users to enjoy benefits from a variety of coupons. The present invention further relates to an advertising method adopting such an advertising system.

Description of the Related Art

In general, effectiveness of banner advertisements("banner ads") across an Internet page is evaluated by CTR. Unfortunately, recent estimates suggest that the upper bounds for most banner ads is an approximately 0.4 to 0.5% CTR. Thus, Internet web sites have adopted new "incentive to visit" advertising scheme for promoting effectiveness of banner ads.

One such form of advertising site may be found at www.cybergold.com, wherein users are paid "web currency" (i. e., currency which can be used through the Internet) as an incentive for click through banner ads. In the web site of www.nomoney.co.kr, if a user downloads and install a program with banner ads to his own computer, connects to the Internet, and works with the downloaded program being displayed onto a portion of user's monitor, an operating server saves up web currency or supplies gifts to the user.

Korean Patent Publication No. 1999-46192 dated July 5, 1999 discloses an approach to promote effectiveness of banner ads, wherein hyper link image is pre-inserted to an information provider's web site, and a user connected to computer networks is transferred to the information provider's web site according to informations

supplied in regards of hyper link image and searches the hidden hyper link image. If such a search results in a success, an incentive is given to the user.

Although it is possible that the incentive to visit advertising scheme may entice a predetermined volume of member visits with a deal(for example, sale of product) referencing a profile of users obtained by entry form filled by the user, such a conventional incentive to visit approach has drawbacks.

In such an incentive to visit scheme for promoting CTR for banner ads, incentives to users are basically restricted since a sponsor and an advertising company are directed related in implementing advertisement. Therefore, such an advertising scheme has structural limits in terms of promotion of banner ads CTR.

In addition, sponsors are willing to pay increased amount of advertising cost since a product purchase through an on-line order system is increasing. However, the incentive to visit scheme failed to propose a further way to increase CTR by attracting user's attention.

SUMMARY OF THE INVENTION

Therefore, it is an object of the present invention to promote an effectiveness of advertisement by increasing click through rates of users through a combination of an advertising message and one or more coupons offering product discount and the like.

It is another object of the present invention to promote an effectiveness of advertisement by supplying a user with a coupon which is available only when the user clicks through commercial advertisements being displayed.

It is still another object of the present invention to give benefits to a coupon provider by exciting consumer's interest while permitting consumers to enjoy an appropriate compensation for product purchase.

It is further another object of the present invention to allow a sponsor to benefit from a reduced advertising cost by replacing cash payment by a coupon offered by a coupon provider.

It is still further another object of the present invention to achieve a convenient use of coupon by supplying users with coupons which is redeemable with computer on-line or off-line or storing coupons to on-line system.

The present invention is advantageous in that a sponsor's payment for a user's click on a commercial message presented on the site can be replaced by a coupon from a coupon provider so as to allow the sponsor to enjoy benefits from a reduced advertising cost while promoting effectiveness of advertisement by enticing users to click the commercial message presented on the site through the use of coupon. Further, stimulation to sales of product and a proper compensation for product purchase may increase consumer's interest, resulting in benefits to a manufacturer or salesperson.

According to one aspect of the present invention, there is provided an advertising system in which an operating server having a database built therein, a plurality of members, an advertiser providing information about ads, a coupon provider, and web servers of associated sites are connected over the Internet, wherein the operating server includes a coupon generating module for generating coupons by assigning serial numbers to coupons provided by the coupon provider or setting an expiration date; a coupon-ads matching module for judging whether a coupon issue condition proposed by the coupon provider is matched to an ads display condition proposed by the advertiser and selecting an optimally matched coupon and ads; a coupon-ads coupling module for coupling a coupon and an advertisement selected by the coupon-ads matching module; a conversion module for converting a coupon coupled to a corresponding advertisement into a format available for use if a certain advertisement coupled with a coupon is selected by the member; a coupon management module for providing the coupon converted into a format available for use by the conversion module to the member or storing the coupon into the operating server, and informing the coupon provider of a profile of the member provided with the converted coupon; and a control module for controlling each of the modules and a data flow among each of the modules.

The operating server may further include a coupon search module for allowing members to directly search a desired coupon.

The database built in the operating server includes an ads database for storing advertisement data consisting of text, image or moving picture data and an ads display condition, a coupon database for storing coupon data including coupon publication condition, a coupon coupled ads database for coupling the optimally matched coupon and ads and storing the ads coupled with the coupon, a membership authentication key database for storing authentication key data for membership authentication, a coupon

publication state database for storing state of coupon issued to members, a non-registered member profile database and a registered member profile database for storing profiles of non-registered members and registered members and data related to their preferences for coupons, an individual coupon database for storing coupons issued
5 to each member in accordance with a request from the member, an associated site property analysis database for analyzing property of associated site and storing data obtained from the analysis, and a registered member card database for storing data for card issued to the registered member.

According to another aspect of the present invention, there is provided an
10 advertising method adopted to an advertising system in which an operating server having a database built therein, a plurality of members, an advertiser providing information about ads, a coupon provider, and web servers of associated sites are connected over the Internet, the advertising method including the steps of comparing
15 issue condition/issue target of coupon provided by the coupon provider with display condition/display target of ads provided by the advertiser, coupling matched coupon and ads, and extracting and storing ads coupled with coupon, setting one or more coupon coupled ads being matched from among the stored ads based on the profile of members accessing the operating server, displaying the set coupon coupled ads, selecting the displayed coupon coupled ads, and converting the coupon coupled to the displayed ads
20 into a format available for use.

The above-mentioned step of extracting and storing ads coupled with coupon further includes the steps of setting issue condition/issue target of coupon and display condition/display target of ads, storing coupon information and ads information into the coupon database and ads database, respectively, judging whether a specific coupon
25 and ads are designated by the advertiser and coupon provider, searching coupon and ads being matched from the stored coupon and ads, extracting and coupling the matched coupon and ads and the designated coupon and ads, and storing the ads coupled with coupon into a coupon coupled ads database.

In addition, an advertising method according to another aspect of the present
30 invention further includes the step of setting a number of coupons to be coupled with an advertisement prior to the step of extracting and coupling the matched coupon and advertisement, and designated coupon and ads.

If a member accessing the operating server is a registered one, profile of the member can be obtained from a registered member profile database, and if a member accessing the operating server is a non-registered one, profile of the member is analyzed based on an IP address, and properties of the connected associated sites are
5 analyzed.

As to the displayed ads coupled with coupon, at least one of ads message or coupon message is displayed while the other is prevented from being displayed, and if a user selects the displayed ads message or coupon message, then the coupon or ads message which was not displayed is presented on a screen.

10 If a member intends to search a coupon, he/she may directly input a key word related to the coupon, and search coupons related to the key word from a coupon database, allow the searched coupon list to be displayed, select one from among the coupon list, and allow the coupon coupled advertisement corresponding to the selected coupon.

15 A coupon which is converted into a format available for use is indicated with at least one of a bar code, serial number, logo, character, member profile or a graphic.

After selection of a coupon coupled advertisement, it is judged whether the coupon corresponding to the selected coupon coupled advertisement requires profile of the member. If it does, the profile of the member is inputted only if the member is a non-
20 registered one, and the coupon issue state is stored into a coupon issue state database.

In addition, it is judged whether the coupon corresponding to the selected ads is a type permitting a change of issue condition. If it is a kind permitting the change of issue condition, it is judged again whether the coupon issue counts for change of issued condition are satisfied. If the counts are satisfied, the coupon issue condition is changed
25 and stored in a coupon database.

It is judged whether the selected coupon coupled advertisement is a type in which an advertisement is displayed for a predetermined time period prior to an issue of the coupon corresponding to the advertisement, and if it is, an advertisement display time period is set.

30 It is judged whether the selected coupon coupled advertisement is a type permitting a change of membership, and if it is, a member proposes issue condition for the coupon to an operating server, and the operating server judges whether the

proposed issue condition is acceptable. If the proposed condition is not acceptable, the operating server suggests to the member alternative issue condition which the operating server regards acceptable.

5 In the meantime, it is possible to display onto an on-line computer the coupon which is converted into a format available for use, and allow the converted coupon to be stored into the operating server or a computer system of a member. Alternatively, the converted coupon can be directly used or printed for an off-line use.

10 If the coupon converted into a format available for use is stored in the operating server, a membership authentication key is inputted only for a registered member, and stored in an individual coupon database.

15 If the coupon converted into a format available for use is stored in a computer system of a member, a membership authentication key is inputted only for a registered member, and the coupon is downloaded in the computer system of the member using a coupon management program installed in the computer system of the member, and stored.

If the coupon converted into a format available for use is directly used on-line computer, profile of the user who wishes to use the coupon is transmitted to the coupon provider, and the user receives benefits corresponding to the issue condition with respect to the product matched to the coupon.

20 If the coupon converted into a format available for use is printed and used off-line, the coupon can be converted into other format if a user wishes a format different from the displayed one.

Further, it is possible to transmit the coupon coupled advertisement or the coupon available for use to members through an electronic mail system.

25 In addition, the coupon available for use is stored in an individual coupon database, and the expiration date for the stored coupon is periodically checked. If the corresponding coupon has expired, it is judged whether the coupon is a type redeemable to a cash. If it is, the coupon is exchanged for a cash applying a preset redemption ratio, the cash redemption is stored in the individual coupon database, and the corresponding coupon is deleted from the individual coupon database.

30 According to still another aspect of the present invention, there is provided an advertising method adopted to an advertising system in which an operating server

having a database built therein, a plurality of members, an advertiser providing information about ads, a coupon provider, and web servers of associated sites are connected over the Internet, the advertising method including the steps of allowing the member to make a connection to a web server of the associated site, allowing a proper
5 advertisement to be displayed from an advertisement database of the associated site, allowing the member connected to the web server to click the displayed advertisement, allowing the web server of the associated site to transmit a profile of a member who has clicked the displayed advertisement and the information about the clicked advertisement to the operating server, allowing the operating server to set an optimally matched
10 coupon from among a coupon database based on a profile of the member and the information about advertisement, converting the set coupon into a format available for use; and transmitting to the associated site the coupon which is converted into a format available for use.

According to further another aspect of the present invention, there is provided an
15 advertising method adopted to an advertising system in which an operating server having a database built therein, a plurality of members, an advertiser providing information about ads, a coupon provider, and web servers of associated sites are connected over the Internet, the advertising method including the steps of judging whether a member connected to the operating server is a registered one, analyzing a
20 profile of the member from a registered member database if the member is a registered one and analyzing a profile of the member from a non-registered member database based on a connected IP address from a non-registered member database if the member is a non-registered one, extracting optimum coupons from a coupon database based on the analyzed profile of the member and storing the extracted optimum coupons
25 into a buffer memory, extracting optimum ads from an ads database based on the analyzed profile of the member and storing the extracted optimum ads into the buffer memory, comparing and matching issue condition/issue target and display condition/display target for the extracted coupon and ads, extracting a coupon coupled advertisement by coupling the optimally matched coupon and advertisement from
30 among the matched coupon and ads, and displaying the extracted coupon coupled advertisement.

According to further another aspect of the present invention, there is provided an

advertising method adopted to an advertising system in which an operating server having a database built therein, a plurality of members, an advertiser providing information about ads, a coupon provider, and web servers of associated sites are connected over the Internet, the advertising method including the steps of reading profile data of the member recorded in a membership card of a registered member via a terminal of the coupon provider, transmitting the read profile data of the member to the operating server, confirming whether the member is a registered one from a registered member database based on the transmitted profile data of the member, confirming whether a coupon corresponds to a product stored by the member from an individual coupon database if the member is confirmed as a registered one, transmitting to the terminal of the coupon provider a file of the coupon available for use and deleting the transmitted coupon file from the individual coupon database, and displaying onto a terminal the information about the coupon of the transmitted coupon file.

Additional features and advantages of the present invention will be made apparent from the following detailed description of a preferred embodiment, which proceeds with reference to the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a block diagram illustrating an overall advertising system using ads coupled with a coupon according to the present invention;

Fig. 2 is a block diagram illustrating a configuration of an operating server according to an embodiment of the present invention;

Fig. 3 is a flow diagram illustrating a process of producing a coupon coupled advertisement according to the present invention;

Fig. 4 is a flow diagram illustrating a method of issuing an available coupon from an operating server;

Fig. 4A is a flow diagram illustrating a method of providing with an available coupon members connected to another affiliated web site through the Internet;

Figs. 5A to 5D are flow diagrams illustrating a variety of procedures performed in accordance with a characteristic of an issued coupon;

Fig. 6 is a flow diagram illustrating a method of storing a coupon converted into a format available for use;

Fig. 7 is a flow diagram illustrating a method of using an issued coupon;

Fig. 8 is a flow diagram illustrating a method of using a coupon utilizing a card issued to a registered member;

Fig. 9 illustrates a variety of formats of coupon coupled advertisements;

5 Fig. 10 illustrates a variety of formats of coupons being displayed onto a screen;

Fig. 11 is a flow diagram illustrating a method of extracting a coupon coupled advertisement according to another embodiment of the present invention;

Fig. 12 is a flow diagram illustrating a procedure of treating an expired coupon;

10 Fig. 13 illustrates an example of a coupon coupled advertisement displayed onto an actual web browser;

Fig. 14 illustrates a coupon which is converted into a format available for use and displayed for a selection to be stored, output or used in on-line computer system; and

Fig. 15 illustrates a procedure of using in on-line computer system a coupon converted into a format available for use.

15

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Now, preferred embodiments of the present invention will be explained in more detail with reference to the attached drawings, in which like reference numerals identify identical elements.

20 Throughout the specification, the term "member" means registered and non-registered members, and will be discriminated if a procedure changes in accordance with whether the member is a registered one or a non-registered one. The term "advertiser" means a party who has made a request for ads to be presented onto the Internet, the term "coupon provider" means a party who provides a discount for a product
25 or a service. There exist a possibility that the advertiser and the coupon provider are the same. The term "terminal equipment" refers to wire or radio equipment having a module for reading a membership card.

Fig. 1 is a block diagram illustrating an overall advertising system using ads coupled with a coupon according to the present invention.

30 Referring to Fig. 1, an operating server 100 has a database 180 built therein, and is connected to a member 200, an advertiser 300, a coupon provider 400 and web servers 600 of an associated site through an Internet 700. As is described later, the

operating server 100 is connected to a terminal 500 for reading a card issued to the member 200. Here, the member 200 may access to the operating server 100 through a communication terminal equipment such as a personal PC, web phone, web television or a cellular phone, and the detailed description will be omitted since the technique for such an access is well known.

Fig. 2 is a block diagram illustrating a configuration of an operating server according to an embodiment of the present invention.

A coupon generating module 170 generates a coupon by assigning a serial number or setting an expiration date to a coupon supplied from the coupon provider. A coupon-ads matching module 120 judges whether an issue target condition of coupon proposed by the coupon provider matches to a display target condition of advertisement proposed by the advertiser and selects the optimally matched coupon and advertisement. A coupon-ads coupling module 130 couples the coupon and advertisement selected via the coupon-ads matching module. A conversion module 140 functions to convert a coupon into a format available for use if the member 200 selects a coupon coupled advertisement. A coupon search module 150 allows the member 200 to directly search a desired coupon, and a coupon management module 160 supplies the member 200 with the coupon converted into a format available for use or stores the coupon into the operating server. The coupon management module informs the coupon provider 400 of profile of the member to whom a coupon is provided. In addition, a control module 110 controls each of the modules and a data flow among modules.

A database 180 can be produced in a variety of types considering the kinds of data to be stored therein. The database 180 consists of an ads database 181 for storing ads data including a text, image, moving picture data and ads display condition, a coupon database 182 for storing coupon data including a coupon issue condition and the like, a coupon coupled ads database 183 for coupling the optimally matched coupon and advertisement and storing the coupon coupled ads, a member authentication key database 184 for storing an authentication key data for membership authentication, a coupon issue state database 185 for storing the state of coupon issued to members, a non-registered member profile database 186 and a registered member profile database 187 for storing profiles of the registered or non-registered members identifying an IP address, name, address, age, occupation or preference for coupon, an individual coupon

database 188 for storing, in accordance with the request from members, coupons issued to the members, an associated site characteristic analysis database 189 for analyzing the characteristic of the site associated with the site of the operating server and storing the analyzed characteristic data, and a registered member card database 190 for storing data for card issued to the registered members.

Fig. 3 illustrates a procedure of generating a coupon coupled advertisement according to the present invention.

Referring to Fig. 3, the coupon provider 400 requests for issue of coupon to the operating server(step 100). At this time, the coupon provider 400 may set an issue condition identifying a period for issue of coupon, area, quantity and discount rate and an issue target identifying target age, sex, residence, income level and occupation(step 102).

The coupon generating module 170 of the operating server generates a coupon by assigning a serial number and an expiration date with reference to the issue condition and issue target and stores the generated coupon into the coupon database 182(step 104).

In a similar way, the advertiser 300 requests for an advertisement to the operating server(step 110), and may set an advertisement display condition identifying a period and an area and an advertisement target identifying an age, sex, income level, occupation, hobby and the like(step 112). An information about the advertisement may includes a text, image or a moving picture format, and is stored into the ads database 181.

Here, the ads database 181 and the coupon database 182 may be configured or updated by receiving ads information and coupon information from web site data servers, respectively, if it is expected that a volume of an information exceeds a level to be handled by an operating server itself.

At a state where coupons and advertisements are stored in the coupon database 182 and the ads database 181, respectively, it is judged whether the coupon provider 400 and the advertiser 300 have designated a specific advertisement and a specific coupon to be coupled with each other(steps 106, 116). If not, the coupon-ads matching module 120 is permitted to compare issue condition/issue target and display condition/advertisement target for the coupons and ads stored in databases 181, 182

and search a pair of the optimally matched coupon and advertisement(step 118).

Subsequently, the optimally matched coupon and advertisement are coupled via the coupon-ads coupling module 130(step 122). Here, the matched coupon and coupon is set to 1:1 as a default. Preferably, a plurality of coupons are coupled to a single advertisement(step 120). If the coupon provider 400 and the advertiser 300 have designated any specific advertisement or coupon, those designated advertisement and coupon are coupled.

Thus-generated coupon coupled advertisement is stored in the coupon coupled ads database 183.

10 The coupon coupled to the coupon coupled advertisement stored in the coupon coupled ads database 183 is converted into a format available for use and transmitted to a member, as described later, the coupon coupled advertisement itself can be transmitted upon request of members through an electronic mail system(step 126).

Fig. 9 illustrates a variety of formats of coupon coupled advertisements. "A" of Fig. 9 shows a case where an advertisement and a coupon coupled thereto are displayed at the same time. "A" of Fig. 9 can be converted into a format available for use when a member clicks the advertisement. "B" of Fig. 9 shows a case where either a coupon or an advertisement is not displayed onto a screen. That is, "B" of Fig. 9 is arranged in the form of roll-over which allows a hidden content to be presented if a pointer of a mouse is overlapped onto the object displayed onto the screen. "C" of Fig. 9 shows a case where a plurality of coupons are coupled to a single advertisement, wherein only one coupon is displayed while the other coupons can be directly selected by a user. "D" of Fig. 9 shows a case where any specific coupon is not coupled to an advertisement, wherein a user is permitted to directly search a desired format of coupon. This will be explained later.

25 Further, Fig. 13 illustrates an example of a coupon coupled advertisement displayed onto an actual web browser.

Fig. 4 is a flow diagram illustrating a method of issuing an available coupon from an operating server.

When the member 200 is connected to the operating server 100 through the Internet(step 130), it is judged whether the connected member is a registered one or not(step 132).

If the member is judged as a non-registered one, profile of the member is

- analyzed from the non-registered member profile database 186(step 134), and the characteristic of the associated sites which the non-registered member has visited, see, for example, property of web site, users age level and sex is extracted from the associated site characteristic analysis database 189 based on the analyzed profile data.
- 5 Here, the characteristic of the associated site is pre-stored into the associated site characteristic analysis database 189, and the profile of the non-registered member is stored in the non-registered member profile database 186 with reference to the information transmitted from the associated site based on the fixed IP address of the non-registered member who has visited the associated sites.
- 10 With thus-extracted characteristic of the associated site, an optimum coupon coupled advertisement matched to the non-registered member is selected(step 138). As for the registered member, an optimum coupon coupled advertisement is extracted in real time basis from the coupon coupled ads database 183 based on an logged-in identification of the member.
- 15 Thus-extracted coupon coupled advertisement is displayed onto a web browser(step 140).
- Subsequently, it is determined whether a member intends to search other coupon(step 142), and if it is, a coupon corresponding to the inputted key word is extracted from the coupon database 182 via the coupon search module 150(step 144). If
- 20 the member selects one from among the extracted coupons, a coupon coupled advertisement corresponding to the selected coupon is displayed(step 146). For example, if an optimum coupon proposed by an operating server is a shoe discount coupon of company "A", and the member wishes company "B", the member inputs "company B" and "shoe" as key words for coupon search.
- 25 When the coupon coupled advertisement is displayed and a member clicks the displayed advertisement(step 148), the coupon being displayed in correspondence to the click signal is converted into a format available for use through the conversion module 140(step 150). The converted coupon is transmitted in real time to the member(step 152), transmitted through an electronic mail system, or stored in the
- 30 individual coupon database 188. This will be explained in more detail later.

Fig. 10 illustrates a variety of formats of coupons being displayed onto a screen. Referring to Fig. 10, one of a bar code, serial number, logo or graphic, character

or a profile of member is displayed onto a predetermined portion of a coupon converted into a format available for use. The coupon can be printed as displayed or in other format. As for "A" and "B" of Fig. 10, a variety of informations may be recorded to a bar code. "C" and "D" of Fig. 10 simply denote that the coupon itself can be used, and "E" specifies information about a specific member so as to thereby prevent use of other person.

When an advertisement is displayed by a click, it is possible to transfer to an URL page linked to the advertisement or receive advertisement data only. Here, the advertisement is displayed in the form of a flash advertisement, rich media advertisement, text or moving picture advertisement. If necessary, it is possible to allow the user to respond to a survey which the advertiser has requested, without presenting an advertisement message when the user clicks the advertisement.

Fig. 4A is a flow diagram illustrating a method of providing with an available coupon members connected to another affiliated web site through the Internet; Fig. 4 is a flow diagram illustrating a procedure of supplying from an operating server a coupon converted into a format available for use to members accessing to other associated sites connected through the Internet.

When the member 200 accesses to a web server of an associated cite through the Internet(step 153), an appropriate advertisement is displayed from the ads database of the associated site(step 154).

When the member clicks an advertisement(step 155), web server of the associated site transmits to the operating server a profile of the member who has clicked the advertisement and information about the selected advertisement. The operating server sets an optimally matched coupon from the coupon database based on the profile of the member and the information about the advertisement(step 157). Here, a method of analyzing the profile of the member is the same as that of Fig. 4.

The set coupon is converted(step 158), and the coupon converted into a format available for use is transmitted to the associated site(step 159).

As described above, the present invention has benefits in that the associated site provides an advertisement and an operating server converts the coupon coupled to the advertisement, thus allowing a wide range of utilization of multiple sites.

In the embodiment of the present invention, a method where the associated site provides an advertisement and an operating server converts the coupon coupled to the

advertisement. However, an alternative in that an operating server provides both a coupon coupled advertisement and a coupon.

As described above, a variety of procedures may be performed in accordance with the characteristic of the issued coupon, and Figs. 5A to 5D illustrate such a modified procedure.

Fig. 5A illustrates a procedure in case where the coupon to be issued requires profile of members.

If a coupon coupled advertisement is clicked(step 160), it is judged whether the coupon to be issued requires profile of members(step 162). If the coupon requires profile of members, it is judged whether the member who clicked the advertisement is a registered one(step 164). If the member is not a registered one, profile of the member is inputted(step 166). Subsequently, the coupon issue state for each of the members is stored in the coupon issue state database 185 along with the profile of the members(step 168), the coupon is converted through the conversion module 140(step 170), and the coupon converted into a format available for use is transmitted to the member who has clicked the advertisement(step 172).

If the coupon is a type that does not require profile of members, or if the member is a registered one, the coupon converted into a format available for use is transmitted omitting the above-mentioned step 166.

Fig. 5B is a flow diagram illustrating a procedure in case where an issue condition for a coupon can be changed in accordance with the number of issuances of coupon.

If a coupon coupled advertisement is clicked(step 180), it is judged whether the coupon to be issued is a type permitting a change of an issue condition in accordance with the number of issuances of coupon(step 182). If the coupon is judged as such type, it is judged whether the number of times of coupon issuances for changing the issue condition is satisfied(step 184). If it is judged as satisfied, the coupon issue condition is changed(step 186). Subsequently, the changed issue condition is stored in the coupon database 182(step 188), the coupon is converted through the conversion module 140, and the coupon converted into a format available for use is transmitted to the member who has clicked the advertisement(step 192).

Fig. 5C is a flow diagram illustrating a procedure of transmitting a coupon after a predetermined time period of display of a coupon coupled advertisement.

If a coupon coupled advertisement is clicked by a member(step 200), it is judged whether the clicked advertisement is a type issuing a coupon after a predetermined time period of display of the advertisement(step 202). If it is, an operating server sets an advertisement display time(step 204). Subsequently, it is judged whether a preset time
5 period has lapsed(step 206), and if it is, the coupon is converted into a format available for use(step 208), and transmitted(step 210).

As described above, an improved effectiveness of advertisement can be obtained by setting the advertisement to be displayed for a predetermined time period.

Fig. 5D is a flow diagram illustrating a procedure of handling a coupon in case
10 where a coupon issue condition can be adjusted by a member.

If a member clicks a displayed coupon coupled advertisement(step 220), it is judged whether the coupon is a type which can be adjusted by a member(step 222). If it is, a coupon issue condition is proposed by the member(step 224).

Subsequently, it is judged whether the coupon issue condition proposed by the
15 member is acceptable or not(step 226), and if it is not, an operating server suggest an issue condition acceptable to the member(step 228). If the member accepts the issue condition suggested by the operating server(step 230), the coupon is converted into a format available for use(step 232) and is transmitted(step 234).

Members may enjoy benefits obtained from the adjustment in an issue condition
20 such as an issue area, period, discount rate or discount amount, while the coupon provider may increase revenue by an increased participation of members through an appropriate change of issue condition.

Now, a method of storing, printing or using throughout an on-line system the converted coupon will be explained with reference to Figs. 6 and 7. Fig. 14 illustrates a
25 state where a coupon is displayed for such a selection.

Fig. 6 illustrates a method of storing the coupon converted into a format available for use.

If a coupon coupled advertisement is clicked, converted, and displayed(step 300), it is judged whether the displayed coupon is to be stored(step 302). If it is judged as not,
30 a coupon is used(step 324). A method of using a coupon will be described later in detail.

If it is judged that the displayed coupon is to be stored, it is judged again whether the member is a registered one(step 304). If the member is not a registered one, a

procedure of admitting a new member is performed(step 306). If the member is a registered one, a member authentication key is inputted(step 308), and it is judged whether the member authentication key is normal from the member authentication key database 184. If it is judged as normal, it is judged again whether to store a coupon file into the individual coupon database 188(step 312). If it is, the coupon file is stored into the individual coupon database 188.

If it is judged that the coupon file is not stored in the database 188, the coupon file is transmitted to a member. It is judged whether a coupon management program exists in the computer system of the member(step 314), and if it is judged as not, a coupon management program is installed to the computer system of the member(step 316). Then, the coupon file is transmitted(step 318), stored in the coupon management program(step 320), and the stored coupon is used(step 324).

With the coupon file stored in the individual coupon database 188, it is possible to confirm, in a convenient way, the information about a stored coupon using a terminal equipment from a card.

Fig. 7 is a flow diagram illustrating a method of using an issued coupon.

First, it is judged whether to output a coupon through an output device such as a printer of a member(step 330), and if it is judged to output a coupon, it is judged again whether to change the format of the coupon from the format displayed onto the current screen(step 332). For reference, a variety of formats of the coupon are shown in Fig. 10. If it is judged to change the format of the coupon, an output conversion is performed(step 334). Here, a plurality of formats of the coupon can be supplied to the member, allowing the member to select one from among the plural formats. The redeemable coupon is printed through the printer of the member(step 336) and used for a product purchase.

If the member does not want the coupon to be output, the coupon is clicked(step 338), and the information about the member who has clicked the coupon is transmitted to the coupon provider(step 340). If the member intends to transfer to the home page of the coupon provider so as to purchase a product or a service(step 342), the member may enjoy a discount of a product or other benefits corresponding to the issue condition of the clicked coupon(step 344). Fig. 15 illustrates a method of using a coupon over an on-line system. If an "on-line redemption" is selected(Fig. 15A), a variety of products available for the corresponding coupon are displayed(Fig. 15B). If one from the products

is selected, a detailed information about the selected product is displayed(Fig. 15C). If a "buy" button is clicked, the normal price and the discounted price with a redemption of the coupon are displayed.

Fig. 8 illustrates a method of using a coupon along with a card issued to a registered member.

First, profile of the member recorded onto the card of the registered member is read via a terminal equipment installed in a product sales area(step 370). The terminal equipment may belong to the coupon provider. In practice, the terminal equipment may belong to a sales agent of a product manufactured or sold by the coupon provider.

When the read profile of the member is transmitted to an operating server(step 372), it is confirmed whether the member is a registered one from the registered member profile database based on the transmitted profile of the member(step 374).

If the member is confirmed as a registered one, a redeemable coupon corresponding to a product stored by the concerned registered member is confirmed from the individual coupon database 188(step 376). A coupon file is transmitted to the terminal equipment and the transmitted coupon file is deleted from the individual coupon database 188(step 378).

The information about the transmitted coupon is displayed onto the terminal equipment(step 380), and the coupon can be used through a confirmation procedure.

With such a method described above, a member may enjoy benefits from a product discount through the use of a card without presenting a concerned coupon.

Fig. 11 illustrates a method of extracting a coupon coupled advertisement according to another embodiment of the present invention.

If the member 200 is connected to the operating server 100 through the Internet, it is judged whether the connected member is a registered one or not(step 350).

If the member is judged as a registered one, profile of the member is analyzed from the registered member profile database 187. If the member is judged as a non-registered one, profile of the member is analyzed from the non-registered member profile database 186 based on the connected IP address(step 352).

Subsequently, optimum coupons are extracted from the coupon database 182 based on the analyzed member profile and stored into a buffer memory(step 354), and optimum ads are extracted from the ads database 181 and stored into a buffer

memory(step 356).

Then, issue condition/issue target and display condition/advertisement target are compared and matched for the extracted coupons and ads(step 358), and the optimally matched coupon coupled advertisement is extracted(step 360). Then, the extracted
5 coupon coupled advertisement is displayed(step 362).

With a method according to the embodiment of the present invention, an additional coupon coupled ads database is not required. In addition, an optimum coupon coupled advertisement can be extracted in real time basis from the coupon database and ads database which are updated frequently.

10 Fig. 12 illustrates a procedure of handling an expired coupon.

The expiration date of the coupon stored in the individual coupon database 188 is periodically checked(step 390). It is judged whether each of the coupons has expired(step 392), and if a concerned coupon has expired, it is judged whether the coupon is type to be redeemed by a predetermined amount of cash(step 394). If the
15 coupon is judged as such a type, a preset redemption ratio is applied(step 396) and the redeemed cashed is accumulated into the individual coupon database 188(step 398). Subsequently, the concerned coupon is deleted from the individual coupon database 188(step 400).

The above-described procedure of handling an expired coupon is advantageous
20 in that the necessity of checking expiration data by each of the members is eliminated.

The many features and advantages of the present invention are apparent in the detailed specification, and thus, it is intended by the appended claims to cover all such features and advantages which fall within the true spirit and scope of the invention. Further, since numerous modifications and changes will readily occur to those skilled in
25 the art, it is not desired to limit the invention to the exact construction and operation illustrated and described, accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope and spirit of the invention.

WHAT IS CLAIMED IS:

1. An advertising system in which an operating server having a database built therein, a plurality of members, an advertiser providing information about ads, a coupon
5 provider, and web servers of associated sites are connected over the Internet, wherein said operating server comprises:

a coupon generating module for generating coupons by assigning serial numbers to coupons provided by said coupon provider or setting an expiration date;

10 a coupon-ads matching module for judging whether a coupon issue condition proposed by said coupon provider is matched to an ads display condition proposed by said advertiser and selecting an optimally matched coupon and ads;

a coupon-ads coupling module for coupling a coupon and an advertisement selected by said coupon-ads matching module;

15 a conversion module for converting a coupon coupled to a corresponding advertisement into a format available for use if a certain advertisement coupled with a coupon is selected by said member;

a coupon management module for providing the coupon converted into a format available for use by said conversion module to said member or storing the coupon into said operating server, and informing said coupon provider of a profile of the member
20 provided with said converted coupon; and

a control module for controlling each of the modules and a data flow among each of the modules.

2. A system according to claim 1, further comprising a coupon search module for
25 allowing said members to directly search a desired coupon.

3. A system according to claim 1, wherein said database further comprises:

an ads database for storing advertisement data consisting of text, image or moving picture data and an ads display condition;

30 a coupon database for storing coupon data including coupon issue condition;

a coupon coupled ads database for coupling an optimally matched coupon and advertisement and storing the advertisement coupled with the coupon;

a membership authentication key database for storing authentication key data for membership authentication;

a coupon issue state database for storing state of coupon issued to members;

a non-registered member profile database and a registered member profile

5 database for storing profiles of non-registered members and registered members;

an individual coupon database for storing coupons issued to each member in accordance with a member request;

an associated site characteristic analysis database for analyzing characteristic of associated site and storing data obtained from the analysis; and

10 a registered member card database for storing data for card issued to said registered member.

4. An advertising method adopted to an advertising system in which an operating server having a database built therein, a plurality of members, an advertiser providing
15 information about ads, a coupon provider, and web servers of associated sites are connected over the Internet, said advertising method comprising the steps of:

comparing issue condition/issue target of coupon provided by said coupon provider with display condition/display target of advertisement provided by said advertiser, coupling matched coupon and ads, and extracting and storing advertisement
20 coupled with coupon;

setting one or more coupon coupled ads being matched from among said stored ads based on a profile of members accessing said operating server;

displaying said set coupon coupled advertisement;

selecting said displayed coupon coupled advertisement; and

25 converting a coupon coupled to said displayed advertisement into a format available for use.

5. A method according to claim 4, wherein said step of extracting and storing advertisement coupled with coupon further comprises the steps of:

30 setting issue condition/issue target of said coupon and display condition/display target of said advertisement;

storing coupon information and ads information into a coupon database and ads

database, respectively;

judging whether a specific coupon and advertisement are designated by said advertiser and coupon provider;

searching coupon and advertisement being matched from the stored coupon and ads;

extracting and coupling a matched coupon and advertisement and said designated coupon and advertisement; and

storing a coupon coupled advertisement into a coupon coupled ads database.

6. A method according to claim 5, further comprising the step of setting a number of coupons to be coupled with an advertisement prior to said step of extracting and coupling a matched coupon and advertisement and designated coupon and advertisement.

7. A method according to claim 4, further comprising the step of obtaining profile of a member from a registered member profile database if said member accessing said operating server is a registered one.

8. A method according to claim 4, further comprising the step of analyzing profile of member based on an IP address and analyzing the characteristic of the connected associated sites if said member accessing said operating server is a non-registered one.

9. A method according to claim 4, wherein said displayed coupon coupled advertisement is a type in which at least one of advertisement message or coupon message is displayed while the other is prevented from being displayed, and if a user selects the displayed ads message or coupon message, then the coupon or ads message which was not displayed is presented on a screen.

10. A method according to claim 4, further comprising the steps of:
allowing said member to directly input a key word related to a desired coupon;

searching coupons related to said key word from a coupon database and listing the searched coupons;
selecting one from among the listed coupons; and
displaying a coupon coupled advertisement corresponding to a selected coupon.

5

11. A method according to claim 4, wherein said coupon which is converted into a format available for use is indicated with at least one of a bar code, serial number, logo, character, member profile or a graphic.

10 12. A method according to claim 4, further comprising the steps of, after said step of selecting said displayed coupon coupled advertisement;
judging whether a coupon corresponding to said selected coupon coupled advertisement requires a profile of member;
inputting a profile of member only for the case of non-registered member if it is
15 judged that said coupon requires a profile of member; and
storing a coupon issue state to a coupon issue state database.

13. A method according to claim 4, further comprising the steps of, after said step of selecting said displayed coupon coupled advertisement;
20 judging whether a coupon corresponding to said selected coupon coupled advertisement is a type permitting a change in issue condition;
judging whether a number of times of coupon issuances for change is satisfied if the coupon is judged as a type permitting a change in issue condition;
changing a coupon issue condition if the number of times of coupon issuance is
25 satisfied; and
storing the changed coupon issue condition into a coupon database.

14. A method according to claim 4, further comprising the steps of, after said step of selecting said displayed coupon coupled advertisement;
30 judging whether said selected coupon coupled advertisement is a type in which an advertisement is displayed for a predetermined time period prior to an issue of the coupon corresponding to the advertisement; and

setting an advertisement display time period if it is judged that said advertisement is such a type.

15. A method according to claim 4, further comprising the steps of, after said step
5 of selecting said displayed coupon coupled advertisement;

judging whether a coupon corresponding to said selected coupon coupled advertisement is a type permitting a change of membership;

allowing a member to propose issue condition for the coupon to said operating server if said coupon is such a type;

10 judging whether the proposed issue condition is acceptable;

suggesting acceptable alternative issue condition to said member, if the proposed condition is not acceptable.

16. A method according to claim 4, wherein said coupon which is converted into a
15 format available for use is displayed to an on-line computer system, and stored into said operating server or a computer system of said member, directly used or printed for an off-line use.

17. A method according to claim 16, wherein if said coupon converted into a
20 format available for use is to be stored into said operating server, a membership authentication key is inputted and stored in an individual coupon database only for a registered member.

18. A method according to claim 16, wherein if said coupon available for use is to
25 be stored in a computer system of said member, a membership authentication key is inputted only for a registered member, and a coupon is downloaded in said computer system of said member using a coupon management program installed in said computer system of the member, and stored.

30 19. A method according to claim 16, wherein if said coupon available for use is to be directly used in an on-line computer system, profile of user of said coupon available for use is transmitted to said coupon provider, and said user receives benefits

corresponding to an issue condition with respect to the product matched to said coupon.

20. A method according to claim 16, wherein if said coupon available for use is to be printed for an off-line use, said coupon is transformed to other form if a user intends to
5 print said coupon in a form other than those displayed onto a screen.

21. A method according to claim 4, wherein said coupon coupled advertisement or said coupon available for use is transmitted to said member via an electronic mail system.
10

22. A method according to claim 4, wherein said coupon available for use is stored in an individual coupon database, further comprising the steps of:
periodically checking an expiration date of said stored coupon;
judging whether a coupon is a type redeemable to a cash if a corresponding
15 coupon has expired;
redeeming a coupon with a cash applying a preset redemption ratio and storing the cash redemption in said individual coupon database if it is judged that the coupon is such a type;
and
20 deleting said corresponding coupon from said individual coupon database.

23. An advertising method adopted to an advertising system in which an operating server having a database built therein, a plurality of members, an advertiser providing information about ads, a coupon provider, and web servers of associated sites are
25 connected over the Internet, said advertising method comprising the steps of:
allowing said member to make a connection to a web server of said associated site;
allowing a proper advertisement to be displayed from an advertisement database of said associated site;
30 allowing said member connected to said web server to click said displayed advertisement;
allowing said web server of said associated site to transmit a profile of a member

who has clicked said displayed advertisement and the information about the clicked advertisement to said operating server;

allowing said operating server to set an optimally matched coupon from among a coupon database based on a profile of said member and said information about advertisement;

converting said set coupon into a format available for use; and

transmitting to said associated site said coupon which is converted into a format available for use.

10 24. An advertising method adopted to an advertising system in which an operating server having a database built therein, a plurality of members, an advertiser providing information about ads, a coupon provider, and web servers of associated sites are connected over the Internet, said advertising method comprising the steps of:

judging whether a member connected to said operating server is a registered one;

15 analyzing a profile of said member from a registered member database if said member is a registered one and analyzing a profile of said member from a non-registered member database based on a connected IP address from a non-registered member database if said member is a non-registered one;

extracting optimum coupons from a coupon database based on said analyzed profile of said member and storing the extracted optimum coupons into a buffer memory;

20 extracting optimum ads from an ads database based on said analyzed profile of said member and storing said extracted optimum ads into said buffer memory;

comparing and matching issue condition/issue target and display condition/display target for said extracted coupon and ads;

25 extracting a coupon coupled advertisement by coupling said optimally matched coupon and advertisement from among said matched coupon and advertisement; and displaying said extracted coupon coupled advertisement.

30 25. An advertising method adopted to an advertising system in which an operating server having a database built therein, a plurality of members, an advertiser providing information about ads, a coupon provider, and web servers of associated sites are connected over the Internet, said advertising method comprising the steps of:

reading profile data of member recorded in a membership card of a registered member via a terminal of said coupon provider;

transmitting said read profile data of the member to said operating server;

confirming whether a member is a registered one from a registered member

5 database based on the transmitted profile data of member;

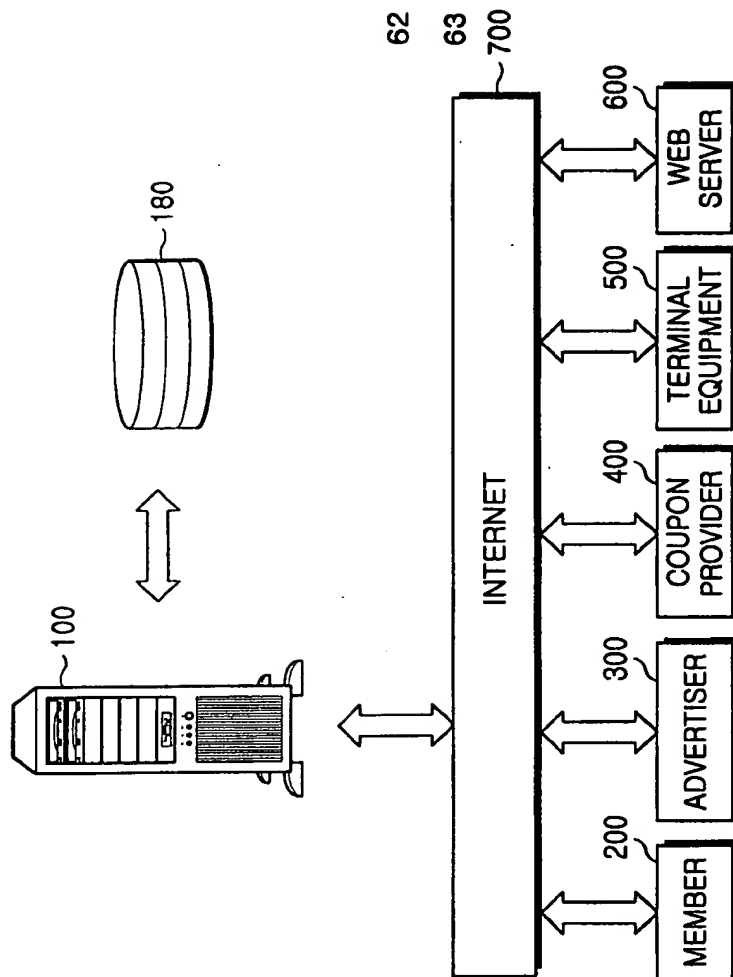
confirming whether a coupon corresponds to a product stored by a member from an individual coupon database if the member is confirmed as a registered one;

transmitting to the terminal of said coupon provider a file of the coupon available for use and deleting said transmitted coupon file from said individual coupon database;

10 and

displaying onto a terminal the information about the coupon of said transmitted coupon file.

FIG. 1



2/16

FIG. 2

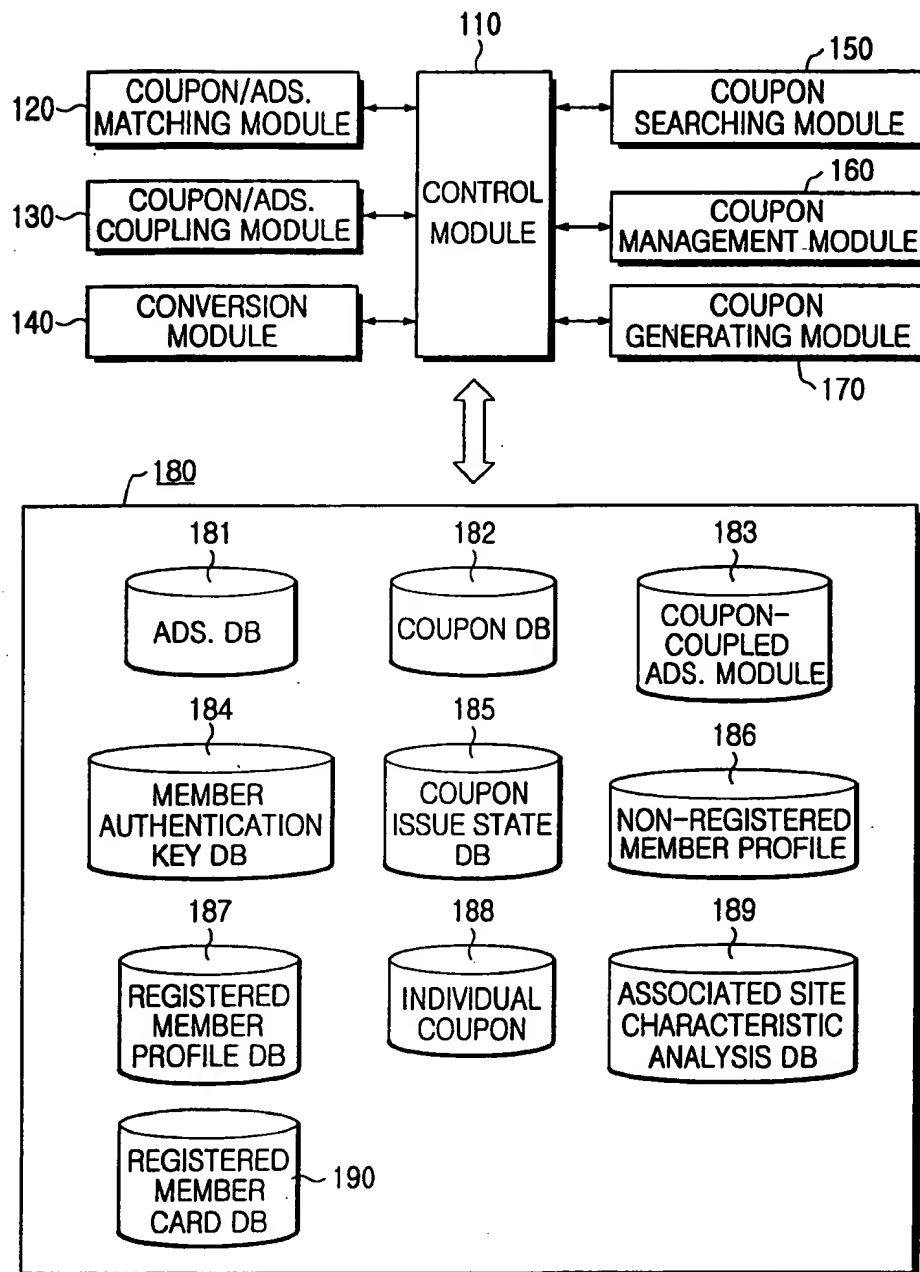


FIG. 3

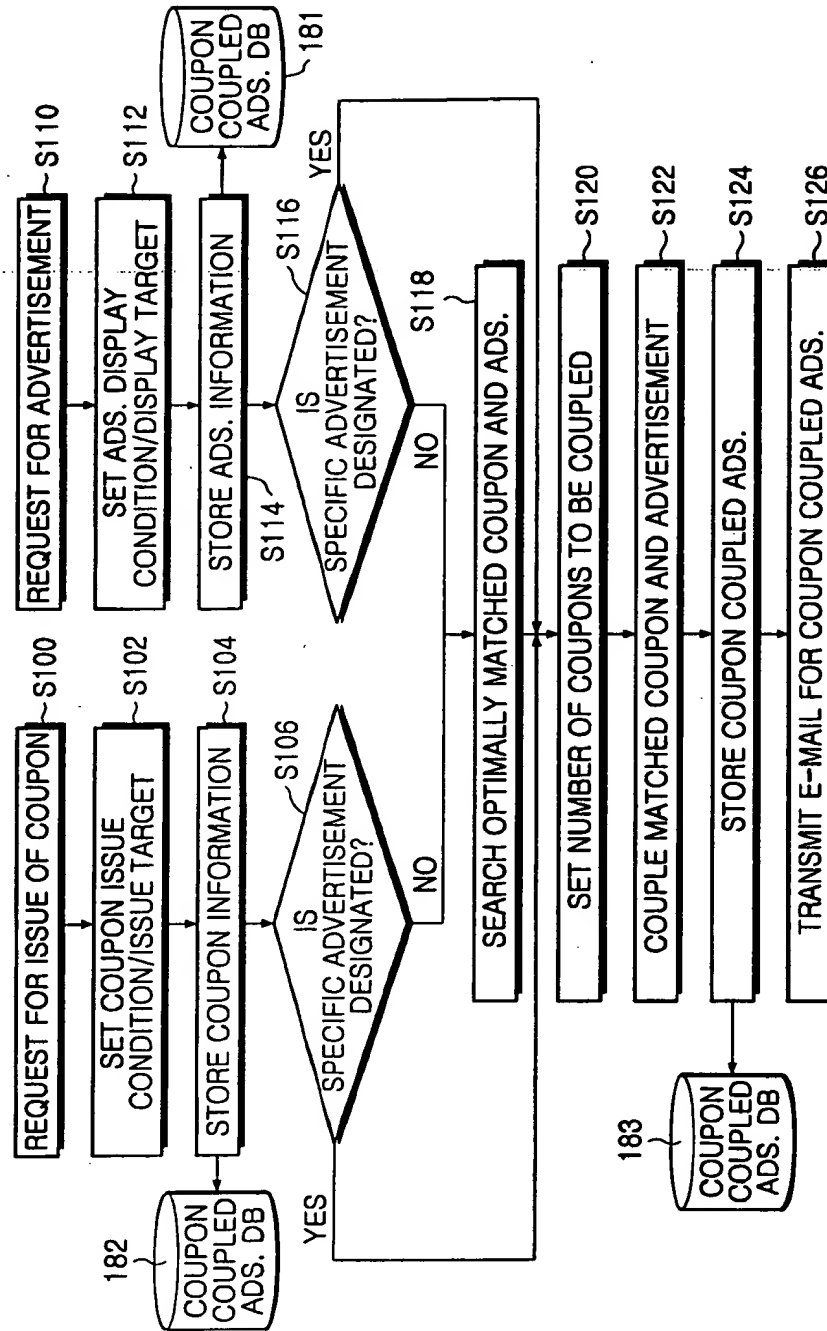
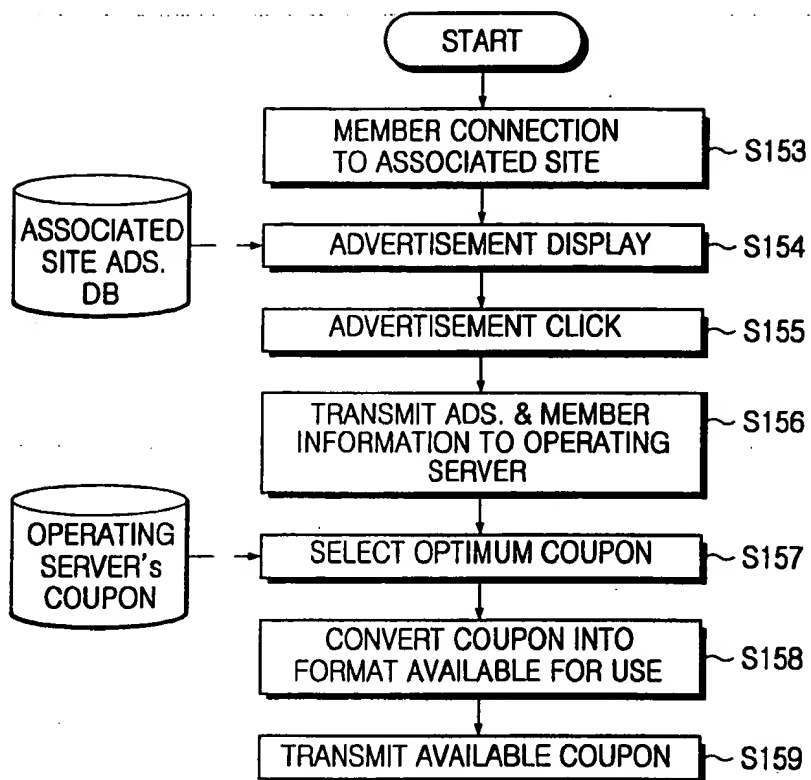
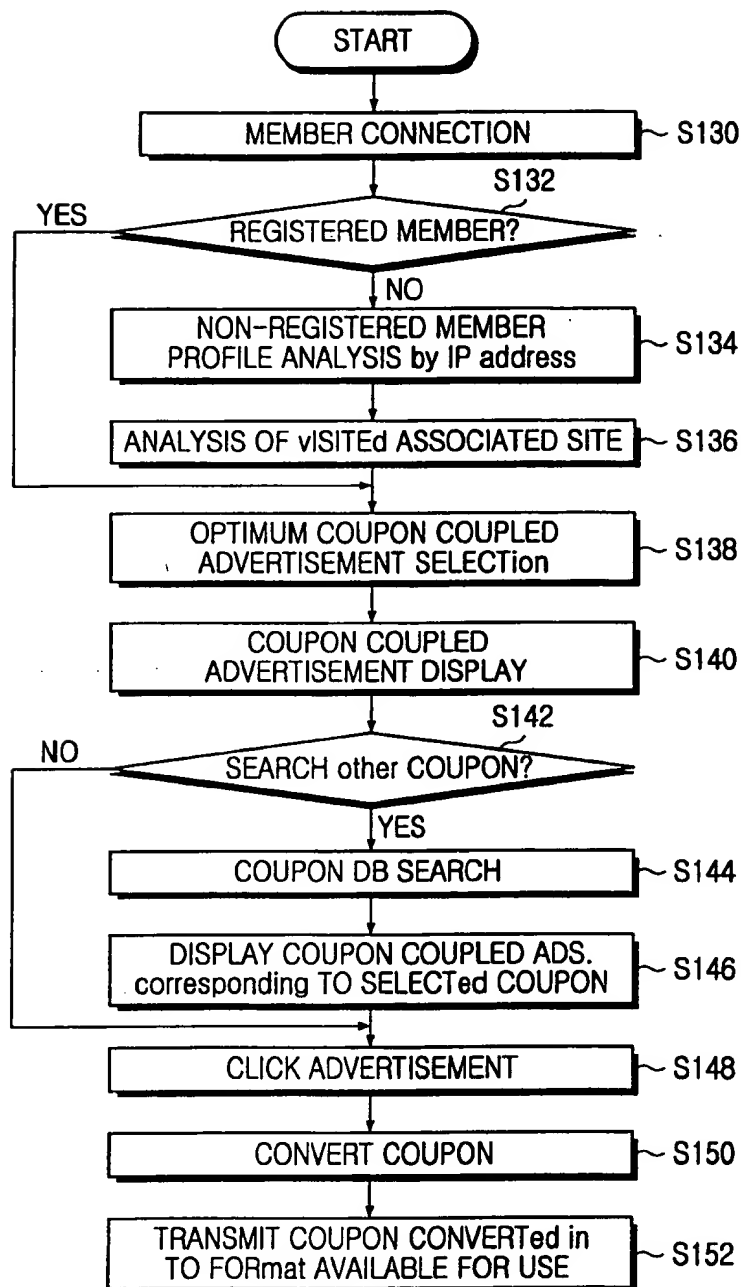


FIG. 4



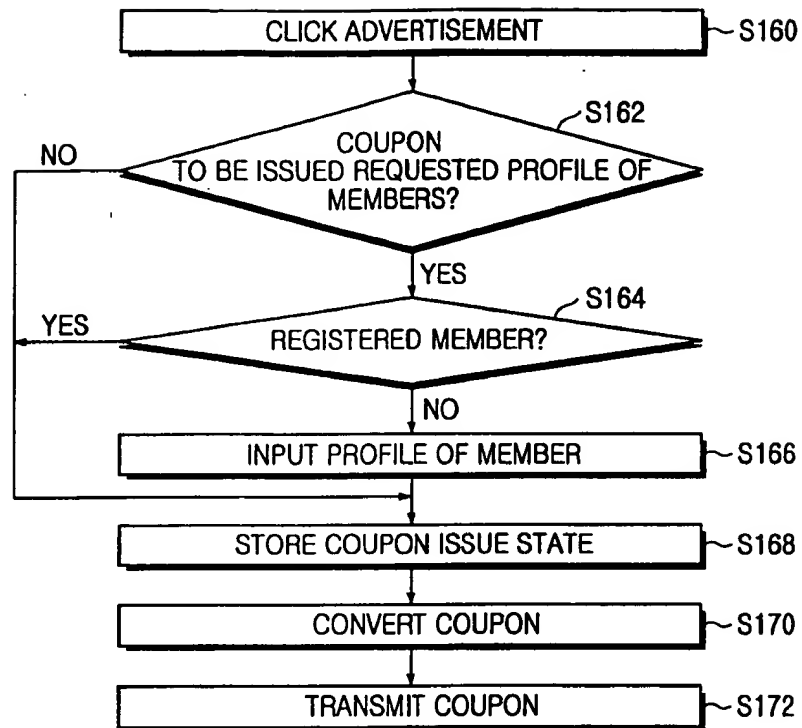
5/16

FIG. 4A



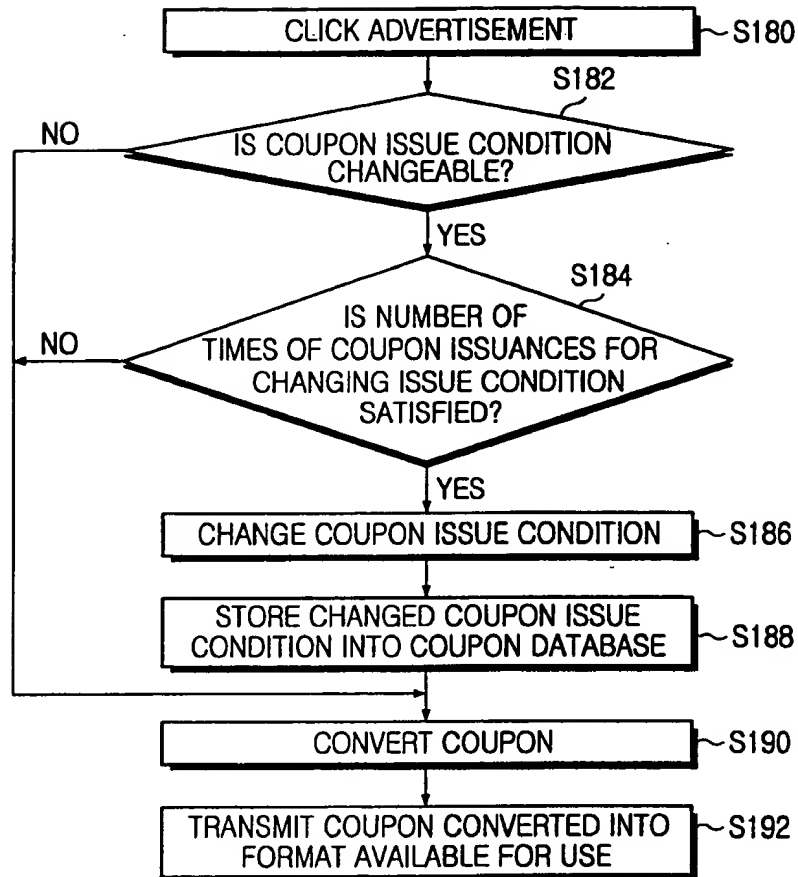
6/16

FIG. 5A



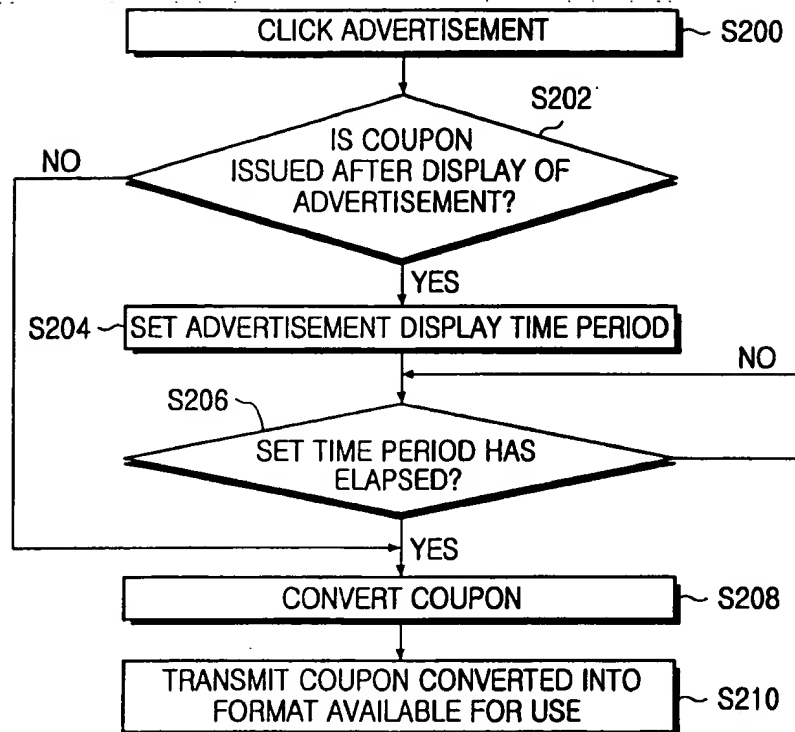
7/16

FIG. 5B



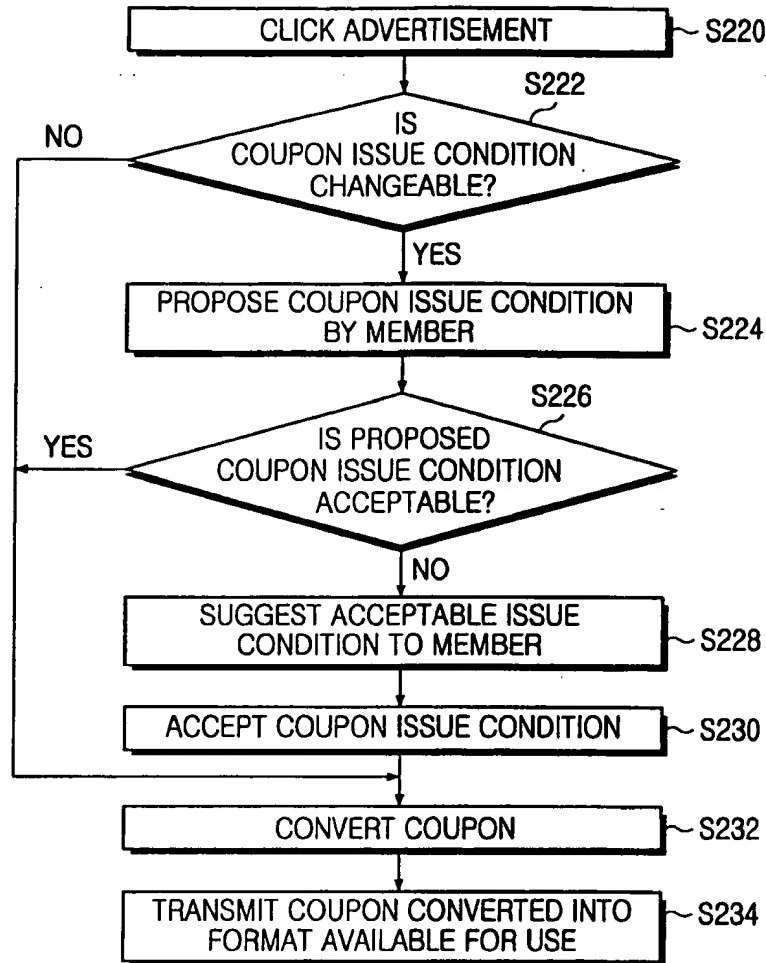
8/16

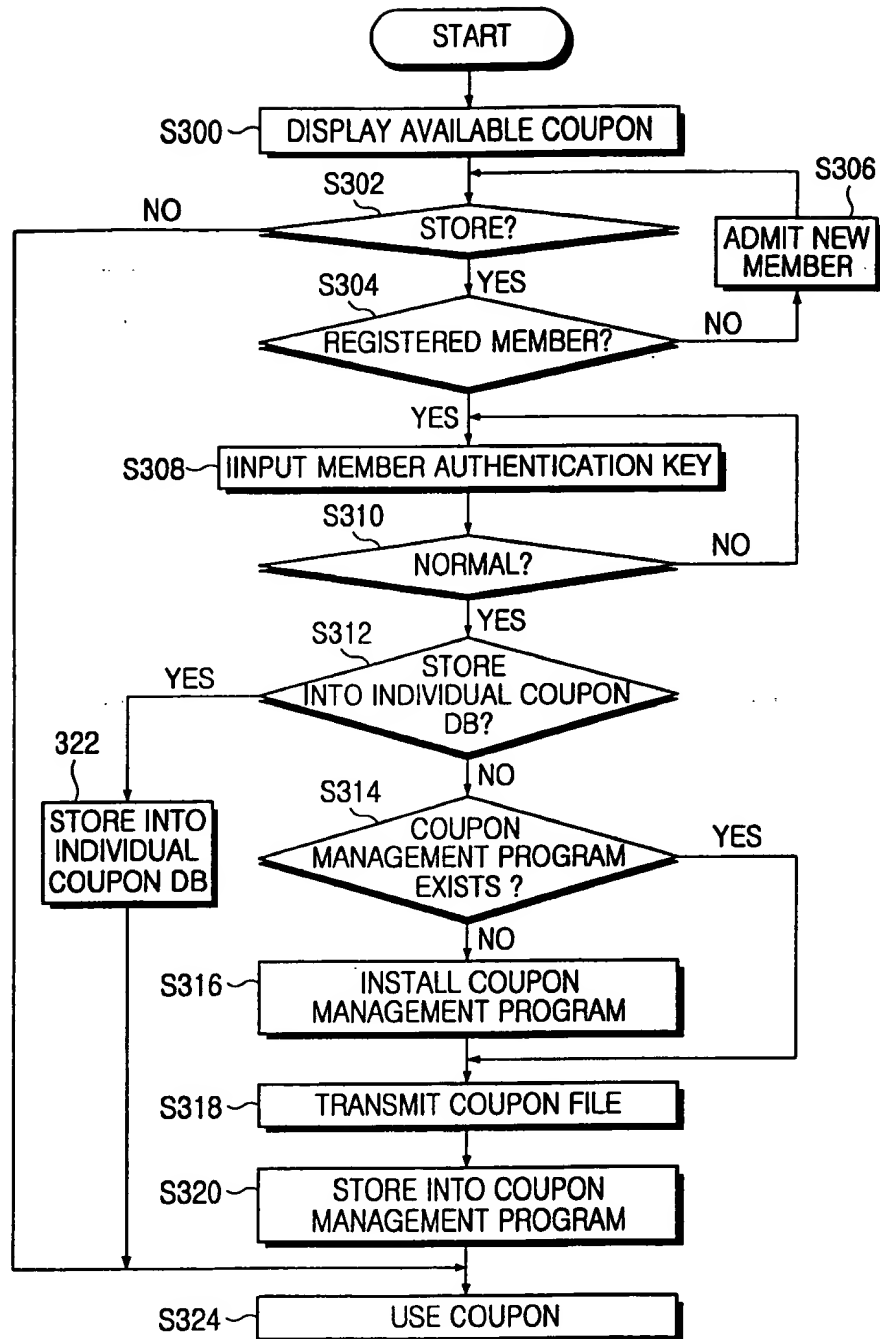
FIG. 5C



9/16

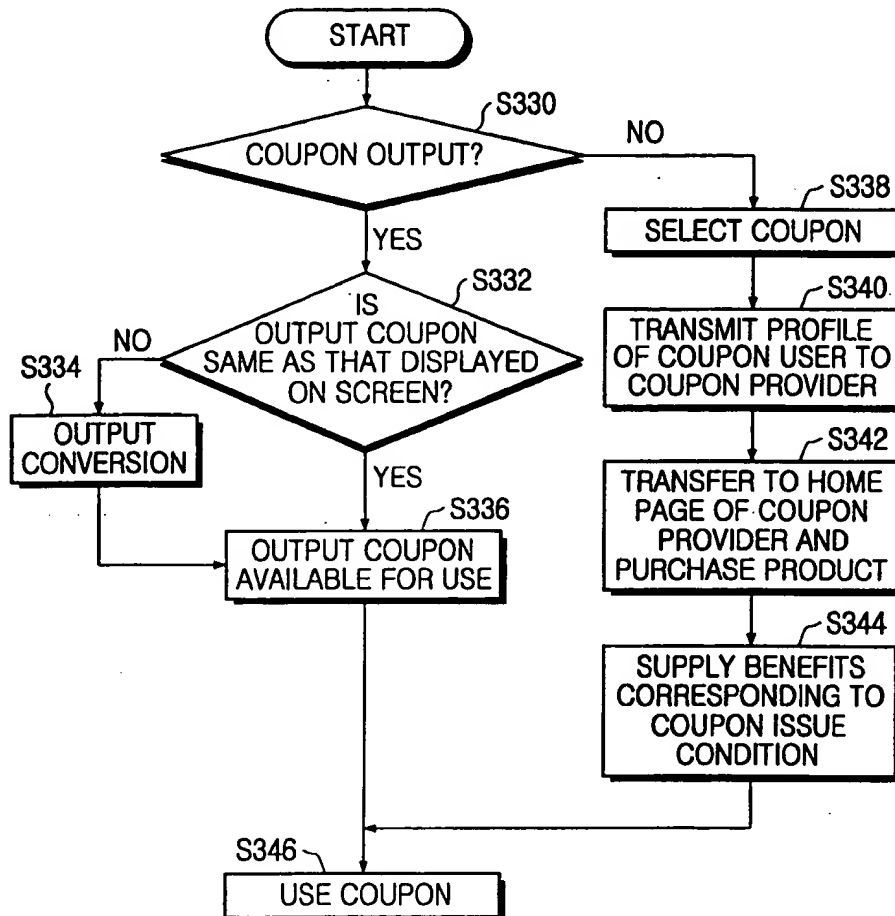
FIG. 5D



10/16
FIG. 6

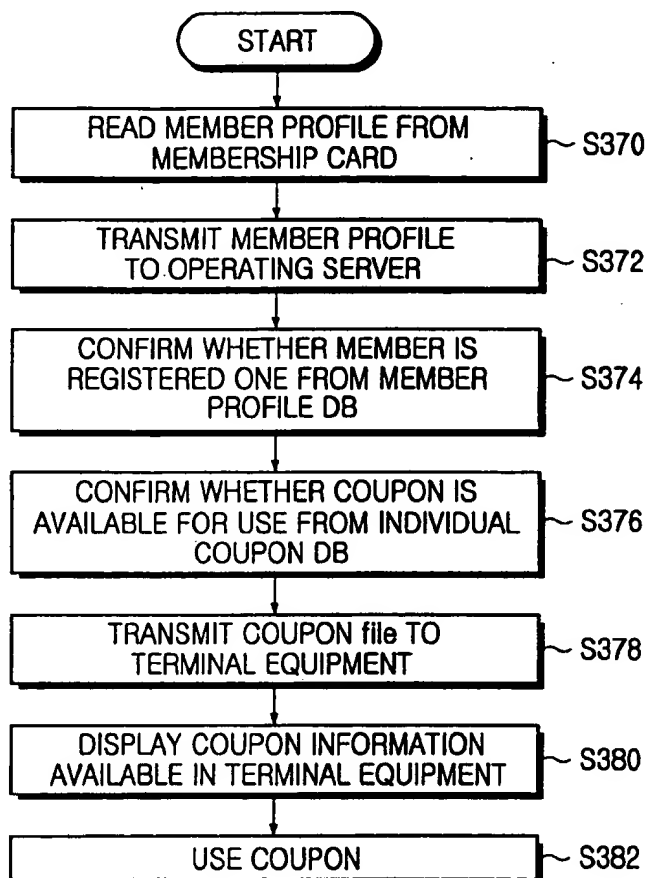
11/16

FIG. 7



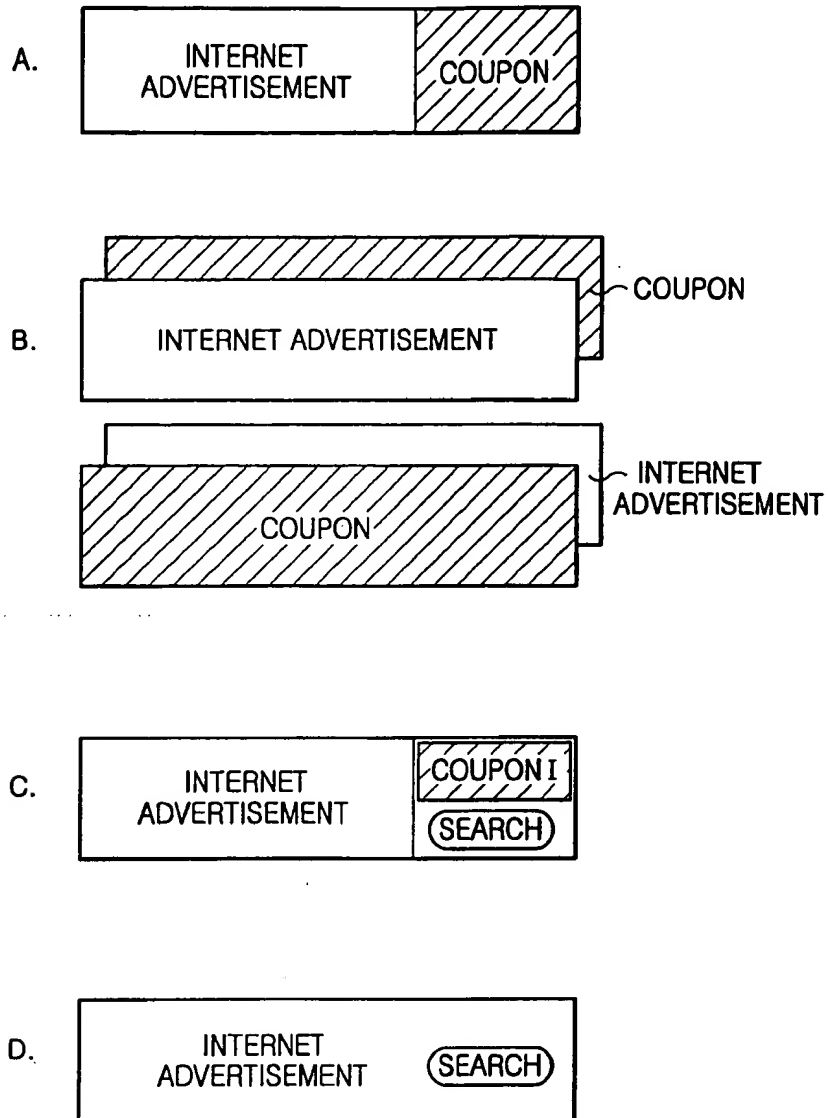
12/16

FIG. 8



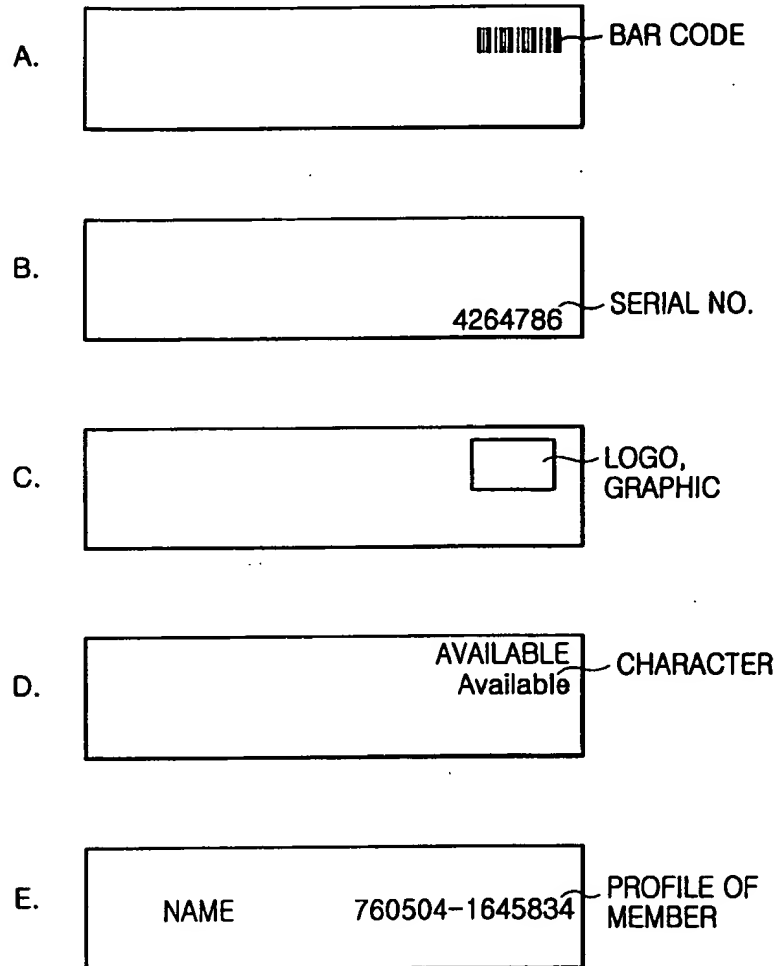
13/16

FIG. 9



14/16

FIG. 10



15/16

FIG. 11

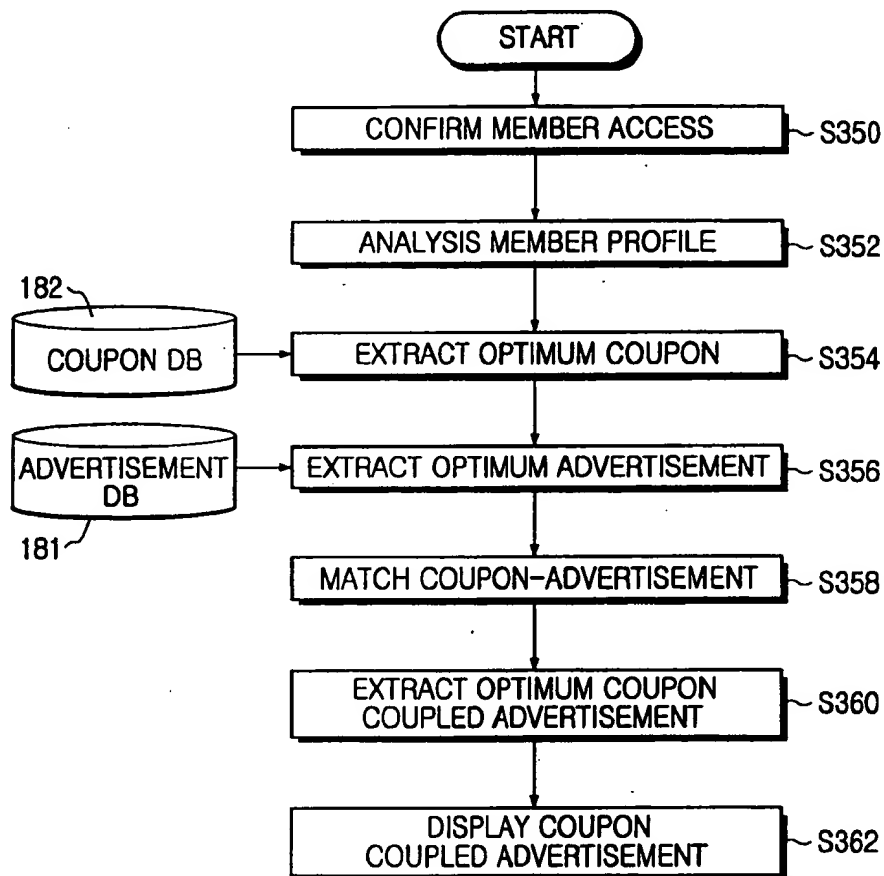
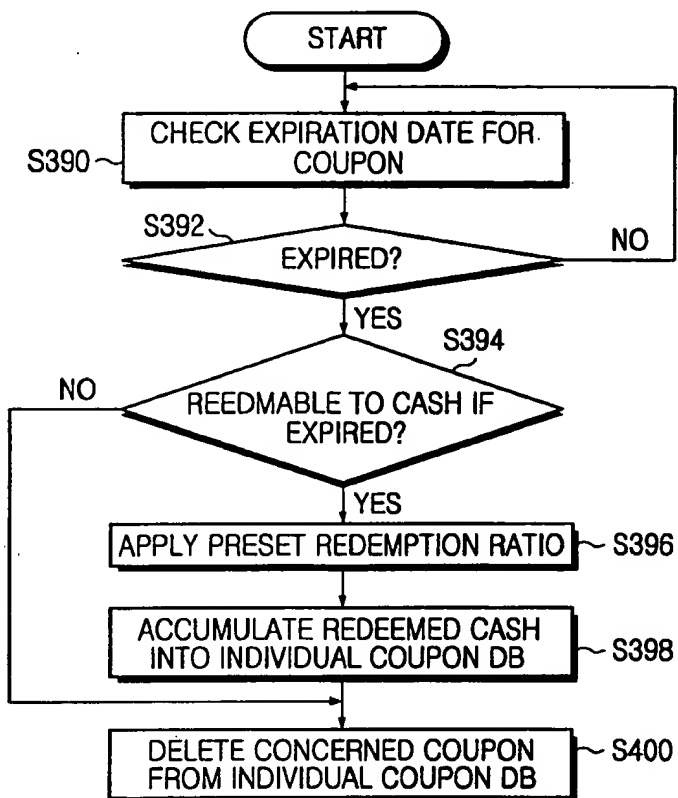


FIG. 12



INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR00/00966

A. CLASSIFICATION OF SUBJECT MATTER		
IPC7 G06F 17/60		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols)		
IPC6 G06F 17/60, 17/00, 17/30		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 822535 A (AT&T CORP.) 1. AUGUST. 1997 FIG 1, 2, 3, 4, 5, 6, 7, 11 ABSTRACT, CLAIMS 1, 2, 3, 4, 5, 7, 11-20, 24-33, 36-47	1-25
A	US 4982346 A (EXPERTEL COMMUNICATIONS INC.) 1. JAN. 1991 FIG 1, 2, 3, 4, 5 ABSTRACT, CLAIMS 1, 2, 3, 4, 5, 6, 7	1-25
A	US 5,933,811 A (PAUL D. ANGELS) 3. AUGUST. 1999 FIG 1, 2, 3, 4, 5, 7, 9-11 ABSTRACT, CLAIMS 1, 2, 3, 4, 5, 6, 7, 9-17	1-25
A	JP 11-184926 A (TOSHIBATEC CO.) 9. JULY. 1999 FIG 1, 2, 3, 4, 5, 6, 7 ABSTRACT, CLAIMS 1, 2, 3, 4, 5, 6, 7	1-25
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.		
* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family		
Date of the actual completion of the international search 11 DECEMBER 2000 (11.12.2000)		Date of mailing of the international search report 13 DECEMBER 2000 (13.12.2000)
Name and mailing address of the ISA/KR Korean Industrial Property Office Government Complex-Taejon, Dunsan-dong, So-ku, Taejon Metropolitan City 302-701, Republic of Korea Facsimile No. 82-42-472-7140		Authorized officer LEE, Un Cheol Telephone No. 82-42-481-5784

Form PCT/ISA/210 (second sheet) (July 1998)